



B62D 1/11

## PATENT ABSTRACTS OF JAPAN

(11) Publication number: 09226602 A

(43) Date of publication of application: 02.09.97

(51) Int. Cl

B62D 1/11

(21) Application number: 08040976

(71) Applicant: NIPPON PLAST CO LTD

(22) Date of filing: 28.02.96

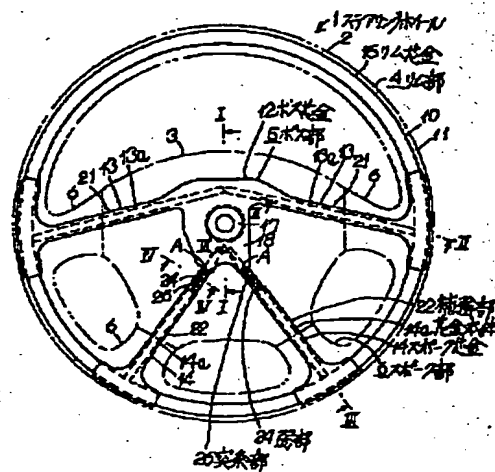
(72) Inventor: SUZUKI MICHITAKA

## (54) STEERING WHEEL

## (57) Abstract:

PROBLEM TO BE SOLVED: To suppress vibration by adjusting a resonance frequency, while ensuring a deformation characteristic of a steering wheel.

- 5 SOLUTION: A spoke core metal 14 of a steering wheel main unit 2 is formed by an internal chill of a core metal main unit 14a in a reinforcing part 22 of an aluminum alloy. In this spoke core metal 14, a weak part 24 of small thickness dimension of the reinforcing part 22 is formed, also a protruded streak part 26 is integrally protrusively provided in an occupant side of this weak part 24. By the protruded streak part 26, strength of the spoke core metal 14 is increased, vibration can be suppressed. In the case that an occupant collides against a rim part 4 in this side, the protruded streak part 26 is broken by receiving force in a tensile direction, the core metal main unit 14a can be smoothly flexed.
- 10
- 15



COPYRIGHT: (C)1997,JPO

BEST AVAILABLE COPY

## Reduced vibration shock absorbing deformable steering wheel

Patent Number: ☐ US5868041  
Publication date: 1999-02-09  
Inventor(s): SUZUKI MICHITAKA (JP)  
Applicant(s): NIHON PLAST CO LTD (JP)  
Requested Patent: ☐ JP9226602  
Application Number: US19970804988 19970225  
Priority Number(s): JP19960040976 19960228  
IPC Classification: B62D1/11  
EC Classification: B62D1/11  
Equivalents:

### Abstract

A steering which reduces vibration and is shock absorbing and deformable. The steering wheel comprises a rim and a boss with a plurality of spokes, the rim, boss and spokes having a core metal. A reinforced spoke-core metal has a spoke deformation region which is a part of the reinforced portion and is thinner than the remaining part of the reinforced portion. A raised portion is included on the driver-side of each spoke deformation region which increases the strength of core metals and restricts vibration of the core metals. The configuration creates a weak point for collapsing the steering wheel in a collision and impact with the steering wheel by the driver, that is, the raised portions receives tensile forces and break, thereby smoothly bending core metal bodies.

Data supplied from the esp@cenet database - 12

BEST AVAILABLE COPY